

About MoveMouse

MoveMouse was written to solve a very specific problem for the blind. Some developers neglect to label some of their buttons, so VoiceOver can't identify them. Now assume the blind person knows a sighted person with the same application. The sighted person could tell the blind person, "start at this (good) button and go half an inch to the right and a quarter inch up to find the hidden button". That's only useful if the blind person could move the cursor by a precise amount. Enter MoveMouse.

MoveMouse is an executable program that calls four OSX Services (which are Automator Workflows). The Four Workflows move the mouse 0.1" left, right, up or down using keystroke combinations. For testing purposes each Service can also invoke a different sound to allow the user to verify that they're moving in the correct direction (available on request).

Installing MoveMouse Services

1. Unzip the Distribution zip file.
2. This will create a subdirectory, called "MoveMouseDistribution" with three items: the MoveMouse app, MoveMouseInstallation.app, and a folder called MMWorkflows.

Right click on the MoveMouseInstallation to start the installation, and then select "Open".

Because the installation app is an executable that you just downloaded from the Internet, depending on your security setting, Mac OS X may not let you just run it. If this is the case, a dialog box should appear, saying "'MoveMouseInstallation.app' is from an unidentified developer. Are you sure you want to open it?". Click 'Open' to allow Mac OS X to run the installation.

4. The installation app will display a dialog box explaining that you can select whether you want to run MoveMouse with noise (or sound) effects or not. Click "OK" to continue or "Cancel" to abort the installation.
5. Next a dialog box, asking "Do you want to install MoveMouse with noise effects?", is presented, where you can enter "Yes" or "No". If you enter "no" followed by a Return, or simply Return ("no" is the default answer), the installation app will install MoveMouse without any sound effects. If you enter "Yes", the installation app will install the "noisy" MoveMouse. The "noisy" MoveMouse makes a ping or click every time you run the app. There is a different sound for each direction. This is useful if you want to be sure the app is running, but can get annoying after awhile.

If you change your mind and want to switch versions, you can simply re-run the installation app and select the option you now want. Remember to first delete the MoveMouseDistribution folder created when you unzipped the Distribution zip file in Step 1.

If your sound is turned on, you should hear Alex (computer voice) say "Installation completed".

6. You should now be able to use the four workflows. In all of your applications and the Finder, if you click on the name of the application in the menubar and pull down to Services, you should now see the four workflows MoveMouseUp, Down, Right, and Left.

7. You can test them right now. As you invoke each of them you should hear four different sounds indicating that the workflow is moving the cursor 0.1" up, down, right, or left.

8. If MoveMouse works for you - skip to step 9. If not, read on. Because MoveMouse is an executable that you just downloaded from the Internet, depending on your security setting, Mac OS X may not let you just run it. To bypass this security feature (because you trust US, don't you?), navigate to the Applications folder in your Finder window. Locate 'MoveMouse' in the list of applications. Right-click on the file name and select 'Open'. A dialog box should appear, saying "'MoveMouse' is from an unidentified developer. Are you sure you want to open it?". Click 'Open' to allow Mac OS X to always run this application.

9. If you'd like to use keystrokes to invoke the four workflows, open System Preferences, Keyboard, Shortcuts. In the left pane, click on Services and scroll down in the right pane until you find the four services (MoveMouseUp, etc).

10. Check the box to the left of each one, and then tap on the right where it says "none", which will change to a button that says "add shortcut". At this point you can tap on the "add shortcut" button and then hold down the key combination you desire to assign to that workflow. We have been using command-option-control-shift and the corresponding arrow key, but you can choose any keystroke you desire.

11. Cleanup: You can now safely delete the Distribution zip file, and the folders created when you unzipped that file.

For feedback, please send all inquiries to allison@podfeet.com

How MoveMouse Works

MoveMouse is hard-wired to move your mouse 0.1 inches each time you invoke one of the Services, so it needs to determine the pixels per inch of your screen. MoveMouse queries your computer's Primary display for its physical dimensions and pixel resolution in x/y. From that, it determines pixels per inch. If you have a second display attached, make sure the display on which you're moving the mouse is the Primary display. (This is controlled in System

Preferences, Displays but is accomplished via dragging a (probably hidden from VoiceOver) banner from one virtual display to another.)

The Automator workflows allow MoveMouse to be used as a Service. These workflows simply run a terminal shell script that runs the MoveMouse app with appropriate parameters. If you would like a version that plays a sound to indicate that the mouse has moved, please contact the development team.

MoveMouse's script was inspired by Jacob Salmela in a post he did in 2013 (<http://jacobsalmela.com/os-x-scripting-how-to-script-a-mouse-click-at-x-y-coordinate/>) but some of the commands he used have since been deprecated, hence MoveMouse was built pretty much from scratch. Jacob notes that his tool was inspired by a Macworld article in 2008 (<http://hints.macworld.com/article.php?story=2008051406323031>) so the project lives on.

Known Issues

If you hit the keystrokes too quickly or hold the keystroke down, MoveMouse will eventually fail. The only way to get out of this is to log out and back into your account.

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